

OIPE

## RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/987,456

TIME: 15:27:16

Input Set : A:\seq\_list 1821\_0070004 ascii

Output Set: N:\CRF3\12062001\I987456.raw

P.S

5 <110> APPLICANT: University of Rochester  
6 Zauderer, Maurice  
7 Ernest S. Smith  
9 <120> TITLE OF INVENTION: In Vitro Methods Of Producing And Selecting  
10 Immunoglobulin Molecules In Eukaryotic Cells  
13 <130> FILE REFERENCE: 1821.0070004  
C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/987,456  
C--> 16 <141> CURRENT FILING DATE: 2001-11-14  
16 <150> PRIOR APPLICATION NUMBER: 60/271,424  
18 <151> PRIOR FILING DATE: 2001-02-27  
21 <150> PRIOR APPLICATION NUMBER: 60/262,067  
23 <151> PRIOR FILING DATE: 2001-01-18  
26 <150> PRIOR APPLICATION NUMBER: 60/298,087  
28 <151> PRIOR FILING DATE: 2001-06-15  
31 <150> PRIOR APPLICATION NUMBER: 60/249,268  
33 <151> PRIOR FILING DATE: 2000-11-17  
36 <160> NUMBER OF SEQ ID NOS: 147  
39 <170> SOFTWARE: PatentIn version 3.1  
43 <210> SEQ ID NO: 1  
45 <211> LENGTH: 57  
47 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
53 <220> FEATURE:  
55 <223> OTHER INFORMATION: p7.5/tk promoter  
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61 <210> SEQ ID NO: 2  
63 <211> LENGTH: 145  
65 <212> TYPE: DNA  
67 <213> ORGANISM: Artificial Sequence  
71 <220> FEATURE:  
73 <223> OTHER INFORMATION: p 7.5/ATG0/tk promoter  
75 <400> SEQUENCE: 2  
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78 tgcaggaatt cgatatcaag cttatcgata ccgtcgacct cgaggggggg cctaactaac 120  
80 taattttgtt tttgtgggcc cggcc 145  
83 <210> SEQ ID NO: 3  
85 <211> LENGTH: 148  
87 <212> TYPE: DNA  
89 <213> ORGANISM: Artificial Sequence  
93 <220> FEATURE:  
95 <223> OTHER INFORMATION: p 7.5/ATG1/tk promoter  
97 <400> SEQUENCE: 3  
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100 ggctgcagga attcgatatc aagcttatcg ataccgtcga cctcgagggg gggcctaact 120  
102 aactaatttt gtttttgttg gcccggcc 148  
105 <210> SEQ ID NO: 4

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107 <211> LENGTH: 149
109 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
117 <223> OTHER INFORMATION: p7.5/ATG2/tk vector
119 <400> SEQUENCE: 4
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122 gggctgcagg aattcgatat caagcttata gataccgtcg acctcgagg ggggcctaac      120
124 taactaattt tgtttttgtg ggcccggcc                                     149
127 <210> SEQ ID NO: 5
129 <211> LENGTH: 150
131 <212> TYPE: DNA
133 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
139 <223> OTHER INFORMATION: p7.5/ATG3/tk vector
141 <400> SEQUENCE: 5
142 ggccaaaaat tgaaaaacta gatctattta ttgcacgcgg ccgccatgac gtggatccccc      60
144 cgggctgcag gaattcgata tcaagcttat cgataccgtc gacctcgagg ggggcctaa      120
146 ctaactaatt ttgttttgtg gggcccggcc                                     150
149 <210> SEQ ID NO: 6
151 <211> LENGTH: 15
153 <212> TYPE: PRT
155 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
161 <223> OTHER INFORMATION: linker peptide
163 <400> SEQUENCE: 6
165 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
166 1          5          10          15
169 <210> SEQ ID NO: 7
171 <211> LENGTH: 15
173 <212> TYPE: PRT
175 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
181 <223> OTHER INFORMATION: linker peptide
183 <400> SEQUENCE: 7
185 Glu Ser Gly Arg Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
186 1          5          10          15
189 <210> SEQ ID NO: 8
191 <211> LENGTH: 14
193 <212> TYPE: PRT
195 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
201 <223> OTHER INFORMATION: linker peptide
203 <400> SEQUENCE: 8
205 Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Ser Thr
206 1          5          10
209 <210> SEQ ID NO: 9
211 <211> LENGTH: 15
213 <212> TYPE: PRT

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215 <213> ORGANISM: Artificial Sequence  
 219 <220> FEATURE:  
 221 <223> OTHER INFORMATION: linker peptide  
 223 <400> SEQUENCE: 9  
 225 Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Ser Thr Gln  
 226 1 5 10 15  
 229 <210> SEQ ID NO: 10  
 231 <211> LENGTH: 14  
 233 <212> TYPE: PRT  
 235 <213> ORGANISM: Artificial Sequence  
 239 <220> FEATURE:  
 241 <223> OTHER INFORMATION: linker peptide  
 243 <400> SEQUENCE: 10  
 245 Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Val Asp  
 246 1 5 10  
 249 <210> SEQ ID NO: 11  
 251 <211> LENGTH: 14  
 253 <212> TYPE: PRT  
 255 <213> ORGANISM: Artificial Sequence  
 259 <220> FEATURE:  
 261 <223> OTHER INFORMATION: linker peptide  
 263 <400> SEQUENCE: 11  
 265 Gly Ser Thr Ser Gly Ser Gly Lys Ser Ser Glu Gly Lys Gly  
 266 1 5 10  
 269 <210> SEQ ID NO: 12  
 271 <211> LENGTH: 18  
 273 <212> TYPE: PRT  
 275 <213> ORGANISM: Artificial Sequence  
 279 <220> FEATURE:  
 281 <223> OTHER INFORMATION: linker peptide  
 283 <400> SEQUENCE: 12  
 285 Lys Glu Ser Gly Ser Val Ser Ser Glu Gln Leu Ala Gln Phe Arg Ser  
 286 1 5 10 15  
 289 Leu Asp  
 293 <210> SEQ ID NO: 13  
 295 <211> LENGTH: 16  
 297 <212> TYPE: PRT  
 299 <213> ORGANISM: Artificial Sequence  
 303 <220> FEATURE:  
 305 <223> OTHER INFORMATION: linker peptide  
 307 <400> SEQUENCE: 13  
 309 Glu Ser Gly Ser Val Ser Ser Glu Glu Leu Ala Phe Arg Ser Leu Asp  
 310 1 5 10 15  
 313 <210> SEQ ID NO: 14  
 315 <211> LENGTH: 1555  
 317 <212> TYPE: DNA  
 319 <213> ORGANISM: Artificial Sequence  
 323 <220> FEATURE:  
 325 <223> OTHER INFORMATION: pVHE transfer plasmid

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327 <400> SEQUENCE: 14
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330 ctgtatcatc ctcttcttgg tagcaacagc tacaggcgcg catatggtca ccgtctcctc      120
332 agggagtgca tccgccccaa cctttttccc cctcgtctcc tgtgagaatt ccccgctcga      180
334 tacgagcagc gtggccgttg gctgcctcgc acaggacttc cttcccgact ccatcacttt      240
336 ctcttgaaaa tacaagaaca actotgacat cagcagcacc cggggcttcc catcagtcct      300
338 gagagggggc aagtacgcag ccacctcaca ggtgctgctg ccttccaagg acgtcatgca      360
340 gggcacagac gaacacgtgg tgtgcaaagt ccagcaccac aacggcaaca aagaaaagaa      420
342 cgtgcctctt ccagtgtatt ctgagctgcc tcccaaagtg agcgtcttcg tcccaccccg      480
344 cgacggcttc ttcggaacc ccgcagcaa gtccaagtc atctgccagg ccacgggttt      540
346 cagtccccgg cagattcagg tgtcctggct gcgcgagggg aagcagggtg ggtctggcgt      600
348 caccacggag cagggtgcagg ctgaggccaa agagtctggg cccacgacct acaagggtgac      660
350 tagcacactg accatcaaag agagcgactg gctcagccag agcatgttca cctgccgcgt      720
352 ggatcacagg ggctgacct tccagcagaa tgcgtcctcc atgtgtgtcc ccgatcaaga      780
354 cacagccatc cgggtcttcg ccateccccc atcctttgcc agcatcttcc tcaccaagtc      840
356 caccaagttg acctgcctgg tcacagacct gaccacctat gacagcgtga ccctctcctg      900
358 gaccgcagc aatggcgaag ctgtgaaaac ccacaccaac atctccgaga gccaccccaa      960
360 tgccactttc agcgcctggt gtgaggccag catctgcgag gatgactgga attccgggga     1020
362 gaggttcacg tgcaccgtga cccacacaga cctgccctcg ccactgaagc agaccatctc     1080
364 ccggcccaaag ggggtggccc tgcacaggcc cgatgtctac ttgctgccac cagcccgga      1140
366 gcagctgaac ctgcgggagt cggccaccat cagtgccctg gtgacgggct tctctccgc      1200
368 ggacgtcttc gtgcagtggg tgcagagggg gcagcccttg tccccggaga agtatgtgac      1260
370 cagcgcacca atgcctgagc cccaggcccc aggcgggtac ttgcgccaca gcactctgac      1320
372 cgtgtccgaa gaggaatgga acacggggga gacctacac tgcgtggtgg cccatgaggc      1380
374 cctgcccaac agggctcact agaggaccgt ggacaagtcc accgaggggg aggtgagcgc      1440
376 cgacgaggag ggctttgaga acctgtgggc caccgcctcc accttcacg tcctcttct      1500
378 cctgagcctc ttctacagta ccaccgtcac cttgttcaag gtgaaatgag tcgac      1555
381 <210> SEQ ID NO: 15
383 <211> LENGTH: 6
385 <212> TYPE: DNA
387 <213> ORGANISM: Artificial Sequence
391 <220> FEATURE:
393 <223> OTHER INFORMATION: unique BssHII site in pVHE
395 <400> SEQUENCE: 15
396 gcgcgc      6
399 <210> SEQ ID NO: 16
401 <211> LENGTH: 7
403 <212> TYPE: DNA
405 <213> ORGANISM: Artificial Sequence
409 <220> FEATURE:
411 <223> OTHER INFORMATION: Unique BstEII site in pVHE
413 <400> SEQUENCE: 16
414 ggtcacc      7
417 <210> SEQ ID NO: 17
419 <211> LENGTH: 446
421 <212> TYPE: DNA
423 <213> ORGANISM: Artificial Sequence
427 <220> FEATURE:
429 <223> OTHER INFORMATION: pVKE transfer plasmid

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431 <400> SEQUENCE: 17
432 ggccaaaaat tgaaaaacta gatctattta ttgcacgcgg ccgcccattg gatggagctg      60
434 tatcatcctc ttcttggtag caacagctac aggcgtgcac ttgactcgag atcaaacgaa      120
436 ctgtggctgc accatctgtc ttcattctcc cgccattctga tgagcagttg aaatctggaa      180
438 ctgcctctgt tgtgtgcctg ctgaataact tctatccag agaggccaaa gtacagtggg      240
440 aggtggataa cgccctccaa tgggtaact cccaggagag tgtcacagag caggacagca      300
442 aggacagcac ctacagcctc agcagcacc tgacgctgag caaagcagac tacgagaaac      360
444 acaaagtcta cgctgcgaa gtcacccatc agggcctgag ctgcccgtc acaaagagct      420
446 tcaacagggg agagtgttag gtcgac                                     446
449 <210> SEQ ID NO: 18
451 <211> LENGTH: 6
453 <212> TYPE: DNA
455 <213> ORGANISM: Artificial Sequence
459 <220> FEATURE:
461 <223> OTHER INFORMATION: unique ApaLI site in pVKE plasmid
463 <400> SEQUENCE: 18
464 gtgcac                                                                6
467 <210> SEQ ID NO: 19
469 <211> LENGTH: 6
471 <212> TYPE: DNA
473 <213> ORGANISM: Artificial Sequence
477 <220> FEATURE:
479 <223> OTHER INFORMATION: unique XhoI site in pVKE plasmid
481 <400> SEQUENCE: 19
482 ctcgag                                                                6
485 <210> SEQ ID NO: 20
487 <211> LENGTH: 455
489 <212> TYPE: DNA
491 <213> ORGANISM: Artificial Sequence
495 <220> FEATURE:
497 <223> OTHER INFORMATION: pVLE transfer plasmid
499 <400> SEQUENCE: 20
500 ggccaaaaat tgaaaaacta gatctattta ttgcacgcgg ccgcccattg gatggagctg      60
502 tatcatcctc ttcttggtag caacagctac aggcgtgcac ttgactcgag aagcttaccg      120
504 tctacgaac tgtggtgca ccatctgtct tcatcttccc gccattctgat gagcagttga      180
506 aatctggaac tgcctctgtt gtgtgcctgc tgaataactt ctatcccaga gaggccaaag      240
508 tacagtggaa ggtggataac gccctccaat cgggtaactc ccaggagagt gtcacagagc      300
510 aggacagcaa ggacagcacc tacagcctca gcagcacctt gacgctgagc aaagcagact      360
512 acgagaaaca caaagtctac gcctgcgaag tcacccatca gggcctgagc tcgcccgtca      420
514 caaagagctt caacagggga gagtgttagg tcgac                                     455
517 <210> SEQ ID NO: 21
519 <211> LENGTH: 6
521 <212> TYPE: DNA
523 <213> ORGANISM: Artificial Sequence
527 <220> FEATURE:
529 <223> OTHER INFORMATION: Unique ApaLI site in pVLE plasmid
531 <400> SEQUENCE: 21
532 gtgcac                                                                6
535 <210> SEQ ID NO: 22

```

→ Use of n and/or Xaa has been detected in the Sequence Listing.  
 Review the Sequence Listing to insure a corresponding  
 explanation is presented in the <220> to <223> fields of  
 each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/987,456

DATE: 12/06/2001

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Input Set : A:\seq\_list 1821\_0070004 ascii

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L:16 M:270 C: Current Application Number differs, Replaced Current Application No

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:2456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124

L:2534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125